UNIVERSITY OF THE FRASER VALLEY

ORIGINAL COURSE IMPLEMENTATION DATE: September 2009
REVISED COURSE IMPLEMENTATION DATE: January 2023
COURSE TO BE REVIEWED (six years after UEC approval)**:** June 2028
Course outline form version: 06/18/2021

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: MATH 063	**Number of Credits:** 1.5 Course credit policy (105)
Course Full Title: Fundamental Math IV **Course Short Title:**	
Faculty: Faculty of Education, Community, and Human Development	**Department:** Upgrading and University Preparation

Calendar Description:

The last of four fundamental-level mathematics courses. Introduces basic algebraic concepts, units of measurement, concepts of geometry, and statistical graphs, and encourages using critical thinking and setting further numeracy goals.

Prerequisites (or NONE):	MATH 062 or UUP department permission (assessment is required).
Corequisites (if applicable, or NONE):	NONE
Pre/corequisites (if applicable, or NONE):	NONE

Antirequisite Courses *(Cannot be taken for additional credit.)*

Former course code/number: **MATH 061**

Cross-listed with: **NONE**

Equivalent course(s): **NONE**

(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)

Typical Structure of Instructional Hours

Tutorials/workshops	45
Total hours	**45**

Labs to be scheduled independent of lecture hours: ☒ No ☐ Yes

Course Details

Special Topics course: **No**
(If yes, the course will be offered under different letter designations representing different topics.)

Directed Study course: **No**

Grading System: **Letter Grades**

Delivery Mode: **May be offered in multiple delivery modes**

Expected frequency: **Every semester**

Maximum enrolment (for information only)**:** 24

Prior Learning Assessment and Recognition (PLAR)

PLAR cannot be awarded for this course because: *students are placed according to the Departmental Assessment.*

Transfer Credit *(See **bctransferguide.ca**.)*

Transfer credit already exists: **No**

Submit outline for (re)articulation: **No**
(If yes, fill in transfer credit form.)

Department approval	**Date of meeting:**	November 2021
Faculty Council approval	**Date of meeting:**	December 3, 2021
Undergraduate Education Committee (UEC) approval	**Date of meeting:**	June 17, 2022

Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Evaluate expressions involving exponents, absolute values, and integers.
2. Solve application problems involving integers.
3. Translate sentences into equations and solve basic linear equations.
4. Recognize, define, and convert basic metric and imperial units.
5. Measure temperature, length, mass, and capacity using an appropriate measuring device.
6. Calculate the perimeter, area, and volume of geometric shapes.
7. Identify and obtain information from pictographs, bar graphs, histograms, line graphs, and circle graphs.
8. Determine mean, median, and mode given a set of data.

Recommended Evaluation Methods and Weighting *(Evaluation should align to learning outcomes.)*

Final exam:	30%	Quizzes/tests:	60%	Assignments:	5%
Holistic assessment:	5%		%		%

Details: Weightings will vary with individual instructors, but assessment methods may include activities, quizzes, unittests, and a final examination.

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Texts and Resource Materials *(Include online resources and Indigenous knowledge sources. Open Educational Resources (OER) should be included whenever possible. If more space is required, use the Supplemental Texts and Resource Materials form.)*

	Type	Author or description	Title and publication/access details	Year
1.	Textbook	Hutchison, D, Berman, B, & Baratto, S.	Prealgebra Ed: 4 McGraw-Hill	2014
2.				
3.				
4.				
5.				

Required Additional Supplies and Materials *(Software, hardware, tools, specialized clothing, etc.)*

Scientific calculator

Course Content and Topics

Module topics include:

- Review of Exponents and Order of Operations
- Integers (e.g. four operations on integers)
- Basic Algebraic Concepts (e.g. introduction to solving equations)
- Measurement (e.g. metric and imperial systems, metric and imperial conversions)
- Introduction to Geometry (e.g. perimeter, area, andvolume of basic shapes and some composite figures)
- Basic Statistical Concepts (e.g. mean, median, mode, bar graphs, line graphs, pie charts)